CLAIMS

What is claimed is:

1. A method for controlling an optical transmitter, the method comprising:

changing laser bias to the optical transmitter from a first laser bias level to a second laser bias level in accordance with a laser bias control scheme; and

changing an electrical modulation amplitude of an optical signal associated with the optical transmitter from a first value to a second value in accordance with an electrical modulation amplitude control scheme.

2. The method as recited in claim 1, wherein the laser bias control scheme and electrical modulation amplitude control scheme are defined such that at least a portion of the electrical modulation amplitude change is implemented at a different time than implementation of the laser bias change.

3. The method as recited in claim 1, wherein the laser bias control scheme and the electrical modulation amplitude control scheme are defined such that the electrical modulation amplitude change is implemented at substantially the same time as implementation of the laser bias change.

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4. The method as recited in claim 1, wherein the laser bias control scheme and the electrical modulation amplitude control scheme are defined such that a substantial portion of the laser bias change is implemented prior to implementation of a substantial portion of the electrical modulation amplitude change.

5. The method as recited in claim 1, wherein the electrical modulation amplitude control scheme and laser bias control scheme are defined such that a substantial portion of the electrical modulation amplitude change is implemented prior to implementation of a substantial portion of the laser bias change.

6. The method as recited in claim 1, wherein the laser bias control scheme is defined such that at least a portion of the change to the laser bias is implemented linearly with respect to time.

7. The method as recited in claim 1, wherein the laser bias control scheme is defined such that at least a portion of the change to the laser bias is implemented non-linearly with respect to time.

8. The method as recited in claim 1, wherein the electrical modulation amplitude control scheme is defined such that at least a portion of the change to the electrical modulation amplitude is implemented linearly with respect to time.

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9. The method as recited in claim 1, wherein the electrical modulation amplitude control scheme is defined such that at least a portion of the change to the electrical modulation amplitude is implemented non-linearly with respect to time.

10. The method as recited in claim 1, wherein the laser bias control scheme is defined such that changing the power to the optical transmitter from a first laser bias level to a second laser bias level comprises one of: changing the power to the optical transmitter from a minimum to a setpoint; or, changing the power to the optical transmitter from a setpoint to a minimum.

11. The method as recited in claim 1, wherein the electrical modulation amplitude control scheme is defined such that changing the electrical modulation amplitude to the optical transmitter from a first value to a second value comprises one of: changing the electrical modulation amplitude to the optical transmitter from a minimum to a setpoint; or, changing the electrical modulation amplitude to the optical transmitter from a setpoint to a minimum.

12. The method as recited in claim 1, wherein the laser bias control scheme and the electrical modulation amplitude control scheme are respectively defined such that the laser bias change and the electrical modulation amplitude change are implemented in response to the occurrence of a predetermined event.

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13. The method as recited in claim 12, wherein the predetermined event comprises assertion of an optical transmitter disable signal.

14. The method as recited in claim 12, wherein the predetermined event comprises deassertion of an optical transmitter disable signal.

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15. A method for controlling an optical transmitter, the method comprising:

changing, during a first predetermined time slot:

laser bias to the optical transmitter from a first laser bias level to a second laser bias level, the change being implemented in accordance with a laser bias control scheme; and

an electrical modulation amplitude of an optical signal associated with the optical transmitter from a first value to a second value, the change being implemented in accordance with an electrical modulation amplitude control scheme; and

changing, during a second predetermined time slot:

an electrical modulation amplitude of an optical signal associated with the optical transmitter from a first value to a second value, the change being implemented in accordance with the electrical modulation amplitude control scheme; and

laser bias to the optical transmitter from a first laser bias level to a second laser bias level, the change being implemented in accordance with the laser bias control scheme.

16. The method as recited in claim 15, wherein the first predetermined time slot is proximate in time to startup of the optical transmitter, and wherein the second predetermined time slot is proximate in time to shutdown of the optical transmitter.

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17. The method as recited in claim 15, wherein the laser bias control scheme and electrical modulation amplitude control scheme are respectively defined such that in the first predetermined time slot, a substantial portion of the laser bias change is implemented prior to implementation of a substantial portion of the electrical modulation amplitude change, and wherein in the second predetermined time slot, a substantial portion of the electrical modulation amplitude change is implemented prior to implementation of a substantial portion of the laser bias change.

18. The method as recited in claim 15, wherein in the first predetermined time slot, the first laser bias level comprises a minimum and the second laser bias level comprises a setpoint, and wherein in the second predetermined time slot, the first laser bias level comprises a setpoint and the second laser bias level comprises a minimum.

19. The method as recited in claim 15, wherein in the first predetermined time slot, the first value of the electrical modulation amplitude comprises a minimum and the second value of the electrical modulation amplitude comprises a setpoint, and wherein in the second predetermined time slot, the first value of the electrical modulation amplitude comprises a setpoint and the second value of the electrical modulation amplitude comprises a minimum.

20. The method as recited in claim 15, wherein, in both the first and second predetermined time slots, at least a portion of the change to the laser bias is implemented linearly with respect to time.

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21. The method as recited in claim 15, wherein the electrical modulation amplitude control scheme is defined such that in both the first and second predetermined time slots, at least a portion of the change to the electrical modulation amplitude is implemented linearly with respect to time.

22. The method as recited in claim 15, wherein the laser bias control scheme is defined such that in both the first and second predetermined time slots, a substantial portion of the laser bias change is implemented linearly with respect to time.

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